

CLAIMS:

1. A method of authenticating an audio-visual signal comprising embedding of a signature generated for at least a first region of said audio-visual signal by spreading bits of said signature over a portion of said audio-visual signal, said portion being larger than said first region.

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2. A method according to claim 1 whereby said portion is significantly larger than said first region.

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3. A method according to claims 1 or 2 whereby said signature is embedded as a watermark.

4. A method according to claim 3 whereby the watermark is a spread spectrum watermark.

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5. A method according to claims 3 or 4 whereby the watermark is embedded according to the best trade-off between payload size of said audio-visual signal, robustness of said watermark and visibility of said watermark.

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6. A method according to any of the preceding claims whereby each signature bit is embedded multiple times in different locations within said portion.

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7. A method according to claims 1 to 5 whereby spreading said signature bits comprises decomposing said signature bits to multiple areas or a single large area within said portion such that information needs to be extracted from said multiple areas or said single large area within said portion, in order to evaluate the original signature bits.

8. A method according to claim 7 whereby said embedding spreads each signature bit over the whole audio-visual signal.

9. A method according to any of the preceding claims whereby said signature comprises combined signature bits for a plurality of regions of said audio-visual signal.

10. A method according to any of the preceding claims whereby the location of
5 said portion has no fixed relationship to said region.

11. An apparatus for authenticating an audio-visual signal comprising a means for embedding a signature in an audio-visual signal according to the method of claim 1 comprising

10 a means for generating a signature, said signature being generated for at least a first region of said audio-visual signal, and

a means for embedding said signature in said audio-visual signal, whereby said signature is spread over a portion of said audio-visual signal, said portion being larger than said first region.

12. A computer readable medium having a plurality of computer-executable instructions for performing the method according to claim 1 comprising

a first program module generating instructions for a computer for generating a signature, said signature being generated for at least a first region of said audio-visual signal,

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a second program module for generating instructions for a computer for embedding said signature in said audio-visual signal, whereby said signature is spread over a portion of said audio-visual signal, said portion being larger than said first region.

13. Use of the method according to claim 1 in a surveillance camera or security camera or digital image camera or digital video camera or a medical imaging system.